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From the Genesee Farmer.

WARMING HOUSES.

Some of our subscribers and correspondents, who propose building houses, have requested some information as to the best method of heating them during our winters, and this may serve as an apology, should one be deemed necessary, for the introducing of a topic more properly belonging to another season of the year.

The saving of fuel is daily assuming a greater importance among the inhabitants of this country, where the forests are rapidly disappearing, or where, as in many sections of the wide west, the country has always been destitute of timber. The broad fire places of our paternal mansions have been superseded by stoves; and to supply these with fuel where a number are required, as in the usual method of warming houses, is found to occasion heavy drafts on the income of most individuals. The great waste of heat that takes place in all the ordinary stoves and fire places, has turned the attention of men of science to the providing a remedy for the evil, and to efforts to provide a suitable temperature at a less expenditure than is usually incurred. Various methods have been suggested for economizing heat, some of which we shall notice. All are on the principle of warming a house by a single fire, and all are more or less efficient for that purpose.

A few years since, Mr Fessenden, late editor of the New England Farmer, devised, and patented, we believe, a plan for warming rooms by hot water, and the system has been acted upon to a considerable extent in some of the eastern cities and large manufactories. It is founded on the well known fact that warm water always rises, and will continue to do so until the whole mass is brought to the boiling temperature, should the heat be continued to that point. A copper boiler is placed in the lower part of the building to be warmed, and pipes of copper connected with the boiler rise and pass through the various rooms to be warmed. These pipes, as well as the boiler, are water tight, and are filled to the top with water. When the fire is kindled, the water in the boiler being first warmed rises in the tubes, and displaces the cold water, which sinks into the boiler to be heated in its turn. Thus the circulation is kept up, and the rooms are gradually and equally warmed by the hot water contained in the pipes. This method has been highly approved for heating green houses, the heat being considered less drying and injurious to growing plants, than air heated by direct contact with iron stoves. That it will come into general use can hardly be expected, however, the apparatus requiring a nicer adjustment than can in ordinary cases be expected. It has one great advantage to recommend it, and that is, fires can hardly ensue from the use of such pipes; a difficulty which renders the ordinary stove most objectionable.

Several plans for warming rooms with heated air have been devised, one of which was described in the 6th vol. of the Farmer; but as our list of subscribers has since that time greatly increased, we shall for their benefit give the plan there presented, and which has, where adopted, succeeded admirably. The apparatus "consists of a large box stove, surmounted with two flat cast iron drums, and these again by two sheet iron ones. These four drums are made to communicate with each other, and with the stove by short pieces of pipe, joined to their alternate ends. The smoke and heated current of air, after it leaves the stove, is thus broken in its course eight times, and is deprived of its heat before it finally passes away. The heat is communicated to the air outside the drums, which rises in large volumes about them, in consequence of the increased temperature; and is retained from escaping by a brick wall around the whole apparatus, except the door of the stove which is left even with the outside of the wall. A chamber is thus formed, from which the heated air (in tubes) is at once conducted to any part of the house. The apparatus is placed in a small open cellar, and renders all fires above stairs unnecessary." Perhaps if the drums were placed vertically, instead of horizontally, as suggested by the inventor, the current from the stove would be sooner and more effectually deprived of its heat.

In Prof. Silliman's Journal for April, 1838, there is a communication on this subject from a gentleman in Virginia, in which the objections against this mode of warming houses are pointed out and obviated. His dwelling was warmed by such a furnace and air chamber, and as the air was admitted into the chamber of the furnace from the hall, or basement room, the air ascended to the parlors loaded with coal dust and other impurities. This evil was at once remedied by obtaining the air in pipes from without the house. This, besides obviating the difficulty of the dust, furnished a constant supply of fresh air. In rooms warmed by heated air, (and the difficulty attends nearly in an equal degree those warmed by a common stove,) it is found that the thermometer indicates a higher temperature in the upper part of the room than in the lower part, frequently as much as six or eight degrees, thus keeping the feet almost constantly cold, while the person is comfortable in other respects. This state of the air, reverses the injunction of Boerhave, to keep the feet warm and the head cool, and as far as its influence extended was injurious to health. As the rooms were tight, it was evident that the warm air after parting with its caloric settled to the floor, and remained there causing the reduction shown by the thermometer. To remedy this, a pipe was led from the floor to the bottom of the air chamber in the furnace, and the cooled air passed off so rapidly, that when a supply of fresh air was admitted by a pipe into the parlor, to keep up the purity of the air, the quantity of which could be regulated by a valve, the thermometer gives a difference of only a degree and a half between the lower and upper part of the room. This arrangement has been tested for five years, and has been perfectly satisfactory.

It may be here remarked, that where it is required to give out heat, as in the case of the stove and drums to the air chamber, rough and black bodies are far preferable to bright or polished ones; and for the same reason, the pipes that convey the heated air from the air chamber to the several rooms, should be smooth and bright, that the heat may not be given out on its passage. That a house may be warmed in this way from a single fire, does not admit of a doubt; and that it is far more economical than the usual process, is equally clear. We may, however, be permitted to suggest to those about to build, that a little additional expense in building, will do much more towards making a house comfortable, than a greater sum after it is built; and that it is better to shut out the cold air, than to devise ways and means for heating it, after it is once admitted. This is the true economy, and this our climate demands of us.

Since writing the above, we have seen in the London Chronicle an account of a new invention for warming rooms, which promises to supersede all others. A stove six inches in diameter and eighteen inches high, is enclosed in a cylindrical case of thin copper, the bottom of which, as well as that of the stove, is perforated for the admission of air, and the top of which is furnished with a damper or regulator to determine the heat. Such an apparatus will warm a room 25 feet square, and 12 feet high; does not require to be fed with fuel but once a day, and the expense of fuel daily is four pence. The fuel is charcoal. This fireplace has the form of a small column, is moveable, and may be made ornamental. It is evident from the fact of there being no flue or chimney required, that the charcoal is prepared in such a way as to prevent the formation, or secure the absorption, of carbonic gas; and since the patent has been secured, this preparation is all that remains a secret in the apparatus. Should it realize the benefits prophesied of it in the English journals, we may soon expect the method will be transplanted to our shores, and the wonderful properties of "Joyce's Heating Apparatus," as it termed, be tested among ourselves.

From the Farmer's Cabinet.

SOILING NEAT CATTLE.

The system of soiling has strenuous opponents, as well as many ardent advocates. But I believe that the system has never been fully settled by thorough and long tried experiments. A system is not to be established, nor overthrown in a day. We do not arrive at certain results in agricultural improvements by jumping conclusions. All improvement is the result or consequence of steady, progressive and judicious means. Those who undertake experiments are apt to abandon them at once, and in disgust, if success does not attend their first effort. This is wrong. It is important for us in establishing results to view both sides. It is altogether necessary that we know the failures of at-

tempted experiments. It is as essential as it is to be assured of successful results. All tend to increase the store of general knowledge. All knowing wherein there has been a failure, and the course pursued, we can then enter into an investigation of the causes. Let no one be discouraged because a first or second effort is not crowned with success. A farmer has this advantage, that he can experiment on a *small* scale. The soiling system, as I before remarked, has not been satisfactorily settled. Its opponents contend—

I. That the soiling of cattle *in the house during the whole of the year*, is not only not beneficial, but positively injurious. This position is maintained by the following grounds:—1. It is natural. 2. Animals, thus kept, are deprived of air and exercise, and the selection of their food. In the experience of some farmers, cattle thrive much better in the fields, or open air, than when housed.

On the other hand, the advocates of this system say—

I. *That it is a considerable saving of land*, that is, one acre of cut grass soiled being equal to three acres of the same field pastured. The grasses grow much more rapidly in consequence of not being trampled upon.

II. *It is a great saving of food*, for when, say the compilers of the Complete Grazier, "animals are suffered to go upon the field, many plants are necessarily trodden under foot, and bruised, or partly buried in the earth, in which state they are greatly disrelished by cattle, and are suffered to run to waste; a circumstance which never could occur, if the practice of cutting were adopted." If the consumption of plants is an object, that object is obtained by soiling, for all who have paid attention to the subject must have observed that cattle will readily eat plants cut, and given to them when housed, which they would discard in the pasture; yet, according to the authority above quoted, it is known that they will feed, when thrown to them on the ground, which they will reject when given in the stall. Many of the grasses which are sweet and succulent when young, and which cattle eat with the greatest avidity, are quite offensive when suffered to get into ear, and are thereby lost; but by this system of cutting, no loss can occur from this quarter. Plants rejected by one class of animals, when presented to them, even when housed, are not on that account less acceptable to others; indeed they appear to be eaten with greater avidity. "Thus grass, or other food, that has been *blowed or breathed upon* by any animal for a considerable time, becomes unpleasant to other beasts of the same species, but not so to a stock of another class or variety; for them, indeed, it appears to acquire a higher relish."

III. It is contended by the friends of the cutting system, that the balance, so far as regards the *health and comfort of cattle*, is decidedly in its favor over that of pasturing. Cattle are not only less liable to accidents, but do not suffer the same inconveniences or annoyances to which they are subject, when exposed to the sun in the open air—they suffer much less from heat, flies, &c., and it is perfectly reasonable to suppose that they take on flesh more readily. Tranquillity and ease are essential; otherwise animals cannot thrive. An instance in point was cited by one of your correspondents, (see Cab. Vol. ii. page 295,) from which it appears that animals housed for fattening, and well fed, did not take on fat, owing to the circumstance of their becoming lousy, in consequence of fowls roosting over them. The reason why they did not thrive, is obvious—when cleansed of the vermin they fattened well. Heat, restlessness, the terrible annoyance of flies, &c., when cattle are exposed, as they must frequently be in pastures, operate against them.

IV. The Complete Grazier asserts that the proportioned increase of manure obtained by soiling and stall feeding abundantly evince their superiority over pasturing. "Manure is the life and soul of husbandry; and when tillage is an object of attention, there can be no comparison between the two modes of consumption, especially in regard to manure obtained by soiling live stock during summer with green food, for in consequence of the increased discharge of urine during that season, the litter, of whatever substance it may consist, is speedily converted into dung."—p. 81.

Nicholson, in his Farmers' Assistant, refers to a communication from Dr. Thaer, of Hanover, detailing the result of the experience of Baron de Bulow, and others: He lays down the following as facts, which he says, are incontrovertible.

"1. A spot of ground, which, when pastured, will yield only sufficient food for *one* head, will abundantly maintain *four* when left in the stable.

"2. Soiling affords at least double the quantity of manure from the same number of cattle: for the best summer manure is produced in the stable, and carried to the fields at the most proper period of its fermentation; whereas, when dropt on the meadow, and exposed to the action of the air and sun, its power is much wasted.

"3. Cows which are accustomed to soiling, will yield much more milk, when kept in this manner, and fattening cattle will increase much faster in weight.

"4. They are less subject to accidents and diseases—they are protected from the flies which torment them in the fields during the warm weather; and they do not suffer from the heat of summer."

Many other advantages are enumerated. Grazing also has its advantages. Experiments, however, render it certain that soiling, under favorable circumstances, is the most profitable. The Hon. Josiah Quincy, of Massachusetts, ascertained about 1820, that seventeen acres of land, under the soiling system, supported as much stock, and in as good, if not better condition, as had previously required fifty; and Sinclair states, that thirtythree head of cattle were soiled from the 20th of May to the first of October, 1835, on seventeen acres and a half, of which fifty were necessary in pasture. *The saving of land was consequently thirtytwo and a half acres.* From my own experience and observation, I am fully satisfied that there is no mode by which cultivated grasses will pay so well as by soiling. With us Jersey farmers, who can so readily derive the great advantage of top dressing by marl, lime, &c. it is nevertheless an object to turn all to the best account.

Burlington Co. July 23d, 1838.

BONE MANURE.

Bones possess very fertilizing powers as a manure. In an experiment of Mr Watson, of Perth Amboy, with bone dust, who applied it to corn, at the rate of sixteen bushels to the acre, it exceeded in its effects the highest manuring with yard manure or with fish. It does not in general, produce much effect the first year, unless it has been fermented before the application to the soil; this process of fermentation is effected by mixing 25 bushels of leached ashes with 40 bushels of bone dust, moisten the whole with water, and at the end of twentyfour hours, the heap will commence smoking, when the whole should be turned—after laying ten days it will be fit for use. Bone dust is known to be in fermentation by the heat, and the strong smell; before being fermented, it is white, or of the color of bone; after, it assumes a yellowish cast.

The *quantity* of bone dust applied in ordinary cases, is about 20 bushels per acre—if the bones are coarsely broken, 40 bushels should be applied; but in this the farmer must be governed by the quality of the soil; poorer lands requiring more, and those in a higher state of cultivation, less.

Bone manure should be placed within about two inches of the surface; and owing to the small quantity used per acre, the seed should be brought as near to it as possible, without immediate contact, which it is thought better to avoid. In the preparation, a decided preference seems to be given to bones broken small, and the half inch bones are those most generally used. Mr Birks states, that were he to till for early profit, he would use bones powdered as fine as sawdust; if he wished to keep his land in good heart, he would use principally half-inch bones, and would prefer some remaining considerably larger. The reasons for which belief are, that by using bones of a larger size with the dust in them, there would be sufficient of the small particles of the dust to set the (turnip) crop forward, and sufficient of the large particles of the bone left, to maintain the land in good condition for the next crop—it is the small quantity needed to produce a given effect, that renders manures of this class so remarkable.

The *soils* to which they are best adapted, are those of a light and warm nature, for upon wet or cold ground, they have rarely been found to produce any sensible effect. On heavy loams and clay, the accounts of their operations have been almost invariably unfavorable, and it may be laid down as a necessary qualification, in a soil fit for the application of bones, that it should be dry.—*Salem Observer.*

IRRIGATION.—Irrigation is a practice which has not yet been introduced, to hardly any extent, into agriculture in this country; but which would, in most seasons and situations, abundantly repay the husbandman for all the expense and labor attendant on the practice. What an immense value in crops might have been saved during the late drought, had the watering of fields by artificial means been in use to the extent to which it is susceptible!—There is always water enough in the bowels of the earth; and the drawing of it forth and diffusion of it are not so difficult and expensive matters as might at first be imagined. A common well sunk in a favorable spot, with simple horse power applied to a common pump, would in a dry time, be found of great saving benefit even to acres. Many fields are so situated that the springs in the neighboring hills, with little ingenuity and not much expense, might be made to diffuse their animating contents over them, greatly to the advantage of any kind of crop. Artificial means of watering would be found beneficial in most ordinary seasons; but in times of great drought, of incalculable benefit. The most flattering promises of abundant crops, have in many cases, been destroyed by the recent hot and dry time which has been experienced in this State and elsewhere.

We speak not from self experienced knowledge in this matter: but from the dictates of common sense, from what we have read upon the subject. We believe that a method, which might be turned to much good, is hardly thought of among our agriculturists. Irrigation is much employed in many countries in Europe, and with great advantage. In Italy there is scarcely a field or garden which is not furnished with the means of artificial watering. The Milanese territory exhibits the greatest expense of irrigation known in Europe. In that country are to be seen noble canals, running in every direction for this purpose. They are under the authority and protection of the government, which lets out the water to the various occupiers of meadows, at a fixed rate, according to the quantity supplied. Sometimes these canals are farmed out, by putting up the several sluices at auction; in other instances the canals go with the lands.

We contemplate nothing in this way on a public or so extensive a scale; but believe that much might be done in cheap way by individual enterprise. These few thoughts upon this subject are the suggestion of a *dry time*; and we believe that there is as much reason and utility in them as in most of the political essays and paragraphs, which meet us on every side.—*Salem Observer.*

SWINE.

The following observations respecting this ugly, uncouth, but useful animal, are mostly condensed from a number of authors on both sides of the Atlantic:—

It is best to begin to fatten hogs the latter part of August or the beginning of September, so that they may be fit for the butcher before the weather becomes very cold, as it is very difficult to put flesh on them in cold weather.

When you commence fatting swine, care should be used not to give them more than they will eat with appetite. If they become cloyed, their thriving is retarded, and there is danger from staggers and other diseases. Their troughs should be replenished with a small quantity of food at a time, and kept always clean and well seasoned with salt.

An English farmer fattened eight pigs in the following manner, which may be recommended in cases where a constant and regular attention cannot be given to feeding the animals. He placed two troughs in the stye; one he filled with raw potatoes, the other with peas, and gave no water. When the pigs were thirsty they ate the potatoes. In this way it is probable that the animal would not only thrive without water, but need no antimony, brimstone, nor other medical substances; for raw potatoes being cooling and loosing, might serve at once for food and physic. Instead of peas, perhaps dry Indian corn, or what would be better, Indian meal might be substituted. This mode of management with swine, was first recommended in the New England Farmer of Aug. 16, 1824, and we are glad to see that it has been adopted by a writer for the Northern Farmer.

Cunningham, in his Two Years in New South Wales, relates---'I had often heard it said among sailors, that pigs would fatten on coals, and although I had observed them very fond of mushing up the coals and cinders that came in their way, still I conceived that they might relish them more as a condiment or medicine than as food, till I was assured by a worthy friend of mine, long in command of a ship, that he once knew of a pig's being lost for several weeks in a vessel he commanded, and it was at last found tumbled into the coal hole, and there lived all that period without a morsel of any th ng to feed on but coals: on being dragged out, it was found as plump and fat as if it had been feasting on the most nutritious food. Another friend told me of a similar case which came under his observation, and although these may be solitary instances, yet they serve at least to show the wonderful facility which the stomachs of certain animals possess of adapting their digestive powers to such an extraordinary species of food, and extracting wholesome nourishment therefrom. When we consider coal, however, to be a vegetable production, containing the constituent principles of fat, carbon, hydrogen, and oxygen, our surprise ceases.

I always cause as many peas as I want for feeding my hogs, which are not a few in a year, to be regularly malted in the same manner, nearly, as my barley; this management has succeeded very well with me. Young pigs require warm meat to make them grow. Corn and cold water will make them sleek and healthy; but warm beverage is considered requisite to a quick growth.

EVERY STYE SHOULD HAVE A RUBBING-POST. Having occasion to shift two hogs out of a stye without one, into another with a post, accidentally put up to support the roof, I had a full opportunity of observing its use. The animals when they went in were dirty, with broken ragged coats, and with dull heavy countenances. In a few days they cleared away their coats, cleaned their skins, and became sleekly haired; *the enjoyment of the post* was discernable even in their looks; in their liveliness and apparent contentment.

From experience, I have found that swine prefer lucerne to clover. A small quantity of corn, peas, or beans, is certainly necessary to be given to them. Potatoes, either whole or mushed in the water in which they are boiled, or mixed in the trough with barley meal scalded, is very good feed for swine. When rearing, a small quantity of food given once or twice a day, with lucerne, clover, grass and offals, is sufficient. When fattening, a constant supply is essentially necessary, so as not to leave the troughs encumbered with stale food, which should be cleaned out and given to store swine. An iron kettle is best to boil potatoes in, as copper, brass, and lead, are extremely dangerous and generate poison, if allowed to be left with any water in them, therefore it is necessary they should be immediately emptied and cleaned out. Swine while fattening should be kept as clean as possible and well supplied with dry litter. Two or three times in a week add about three table spoonfuls of salt to each bushel of their food, which assists digestion and promotes appetite.—*Essex Gazette.*

SILK FACTORY.

Northampton, July 27th, 1838.

Yesterday I visited Mr. Whitmarsh's establishment, and although I had heard much of his factory, I was most agreeably disappointed. Few men in this country deserve more credit for enterprise and industry. But a few years since he was a successful merchant in Broadway. He retired to this place, since which, he has visited various parts of Europe, to obtain information relating to the Mulberry, the worm, and the manufacture of silk; and, unlike nearly all his travelling countrymen, he has brought his knowledge into practical usefulness. He purchased a neglected spot, which he has improved to such a degree, that it now presents one of the most tasteful country seats that adorn our country, and has erected a fine cottage, after the Corinthian order, not unlike in appearance the Hall of Record, in the Park. The grounds are laid out with a taste that would do credit to an English nobleman. The great objects of attraction, however, are his mulberry grounds, his cocoonery, and his factory. In the first are fields of the plant: they are placed in hedges, about four feet high and about eight feet apart, and men are constantly employed in hoeing them and keeping the ground perfectly clear of weeds and grass. He has every variety of plant, and is making valuable experiments as to which species will best suit the climate, and yield the finest and best silk. Many of these plants he brought from the villas of Italy. His cocoonery is a building of two stories, about thirty feet wide and a hundred and fifty feet long; here are different shelves or tables, on which are myriads of worms in all their different stages, from that of hatching from the egg, to that of winding up their balls. The whole labor of feeding and attending to these myriads of '*manufacturers*' is done by a few females, and is neither arduous nor unpleasant. There are two manufactories, and a third now building. The smallest is the one I examined. It is beyond my power to detail the progress of the manufacture. Every thing appeared neat, and the girls cheerful and happy. The silk, from the raw to the manufactured state, is here perfected, and sells much higher than the imported.—*N. Y. Express.*

Town House, Hartford, Sep. 26, 1838.

MR BOSWELL: Sir—We present you with three stalks of corn, the product of one kernel; the main stalk measures from the root to the top 13 feet 8 inches, the longest sucker 12 feet 10 inches, and the shortest one 11 feet 11 inches—total 38 feet 5 inches—having three full ears of corn. The circumference of the largest ear is 11 inches; the circumference of the three stalks in the thickest part is 13 1-4 inches: it grew in the midst of a field of broom corn, 80 full-grown stalks of which growing within an inch of four feet from it. Now we do not exhibit this stalk of corn for the purpose of shewing our superior skill in farming, but having noticed in your paper that several exhibitions of the kind have been made the present season, it is to show that we have something that goes a little beyond any thing of the kind yet produced; but most of all it is that you may see that kind Providence in rewarding the rich with an abundant harvest, has not been unmindful of the *poor*.—*Con. Courant.* V. CORNISH.

WOOL.--The vast quantities of this article which have been transported from this wool-growing section to Boston and other markets, during the few past weeks are astonishing. Almost daily, eight-horse teams pass through our village, groaning beneath their loads of this commodity. We understand from a gentleman who is acquainted with the matter, that but little remains unsold in this vicinity. This circumstance, together with the overwhelming amount of every article of production, which our agriculturists are gathering to their garners, with joyful hearts,—must of necessity, cause business to revive, and bring our farmers that ample return, which should ever be the just meed of honest industry and the "sweat of the brow."—*Newport, N. H. Argus.*

GEOLOGY OF MASSACHUSETTS.

[Concluded from page 93.]

Clay in Agriculture.—There is abundant evidence that our common clays are of great value when spread upon land. I find that they have been used to a considerable extent in the state; so commonly, indeed, that I abandoned the idea I had formed of giving a detailed account of particular instances. So far as my inquiries have extended, the testimony is decided that our blue clays exert a very favorable effect upon the soil. When spread upon sandy ground we might expect that they would render it a better resevoir for salts and geine. But thoroughly to ameliorate our sandy soils in this way, requires far more clay than is usually employed, and I am perfectly convinced that they exert other than a mechanical influence; that in fact, their effect is analogous to that of lime. I refer here to the blue clays which are far the most common. As to the white clay I have not learnt its effect upon the soil; but from the fertility of some of the soils in Kingston, Plymouth, and Barnstable, where white clay is mixed naturally with sand, I presume this sort is equally valuable with the blue.

In view of the wide extent of our beds of clay, and the use that might be made of it upon land, I felt desirous to ascertain to what principle it owes its fertilizing powers; and therefore subjected a few specimens to analysis in the ordinary way by solution in alkali. The following are the results. I omit however certain white clays, which I found destitute of iron, and therefore probably not very likely to be of much value upon land. But for other purposes, of which I shall speak shortly, they are of a good deal of importance.

Analysis in the Dry way by Alkali.

No.	Locality.	Water & Organic Matter.	Silica.	Alumina.	Peroxide of Iron.	Oxide of Manganese	Lime.	Magnesia.	Sulphur and Loss.
139	Northfield, blue.	10.8	46.93	28 97	9 9			0.1	2.9
140	Sunderland, light blue.	8.2	49.00	29.15	13.1	0.15	slight prec.	0.4	
142	Kingston, white.	3.5	71.00	16 30	7.3	0.30	do.	0.3	1.3
143	Lowell, white.	4.0	61 52	20 50	9 2	0.56	0.56	0.44	3.22

I tried some of our blue clays also, for geine; but in general they yielde l only very little, and perhaps none. For so strongly do they retain water, that not improbably all the loss, especially of soluble geine, might have been imputed to this substance, which had not been all expelled by a heat of 300° F.; and then the peroxidation of the iron by ignition, renders this method of analysis quite uncertain. I, therefore, omit the results; only observing, that the amount of sulphate and phosphate of lime obtained, was about the same as in good soils. I therefore suspect that we must impute most of the good effects of clay as a manure to the large quantity of iron which it contains. On this point, however, I will present some suggestions of Dr Dana, with which he has kindly favored me.

"If we attempt," says he, "to account for the action of *clay*, independent of its amending a sandy soil, we should bear in mind that all our common clays contain more or less of sulphuret of iron.—The conversion of this into the persulphate of iron is the natural consequence of exposure; free sulphuric acid then results, which acts on any lime in the soil, forming sulphate of lime: (the Gay Head crystals of sulphate of lime are so formed;) so that by spreading clay, we spread plaster. The iron in clay also plays its part thus. It is evident from Chaptal's experiments, that protoxide of iron is not beneficial in agriculture. He attributes this to the oxidation of the iron, depriving the plant of its intended oxygen. Nature is no niggard; nor is the reason of Chaptal very philosophical. We have seen above that protoxide of iron does not act on geine. Now by exposure, the protoxide becomes peroxide; and then, I conceive begins an action similar to that of lime. If the free sulphuric acid, produced as we have supposed, finds not lime enough, it will decompose all earthy geates, and thus a fresh portion of nutriment is set at liberty. Both the effects of clay—the production of plaster and the formation of peroxide of iron, are speedily produced by burning the clay, as is often practised."*

Still more recently, Dr Dana adds the following: "Some facts have lately come under my eye, and have recalled others to mind, which I have followed up experimentally; all tending to show, *that if iron peroxidates itself in contact with vegetable fibre, the texture of the vegetable fibre is weakened*, and geine is produced, and that *in a few hours. It is during the passage from protoxide to peroxide that the 'saponifying' action takes place*, geine is produced, and then *combines with peroxide*."

In the few analyses which I have given above of our clays, I have considered all the iron in them as existing in the state of protoxide; although I made no attempt to ascertain whether some of it might not be a peroxide. Very probably this may to some extent be the case: especially where the clay has a yellowish tinge. Yet for the most part, I doubt not it is a protoxide. A slight error here cannot affect the reasoning above presented.

I hope our farmers will make more numerous and accurate experiments upon the use of clay as a manure; not merely upon sandy land, but following the suggestions of Dr Dana, upon other soils, in the expectation that its action will be analogous to that of lime. Probably, the best clay for this purpose occurs in the valley of the Connecticut river; but it abounds in almost every part of the state, and perhaps it may in a good measure supply the deficiency of lime. It will of course require to be laid on in much greater quantity than marl, and probably, as in the case of marl, too much may be used. How much ought to be used is a fair subject for experiment.

Peat Swamps.—The peat swamps of New England have become a vast repository of organic matter, which is, and has been, for ages increasing. In addition to the larger vegetables, which, as they die, fall and are enveloped in the soft matter on which they grew, there is a thick mat of moss, which—especially the sphagnum—continues to flourish at the upper part while the lower part dies and decays. In favorable circumstances as to wet and temperature, this mass of vegetable matter becomes converted into peat. Only a small part, however, of what is thus accumulated, becomes peat of such a character that it answers well for fuel. Often it is too much mixed with mud to be easily burnt, and sometimes the vegetable fibre is scarcely changed. Yet the whole of it is capable of being converted into vegetable nutriment. And I am convinced, from all that I have seen and heard, that Massachusetts contains enough of this geine and vegetable fibre in her swamps, to render all her fields fertile for centuries. In other words, here is an exhaustless source of geine. Some of it is already in a soluble state; and therefore the black matter from swamps, is rarely spread upon soils without producing some benefit. Yet for the most part the geine is in such a state as to require some chemical change before it will become soluble nutriment, fit to be absorbed by roots. It is an important inquiry then, what is the best mode of accomplishing this change. This has been attempted, first, by mixing the peaty matter with good manure in alternating layers, and suffering them to ferment for a long time, the peat being in much the greatest quantity. Secondly, by mixing it in a similar manner with lime; and thirdly, by mixing it with alkali, or some compound containing alkali. The principles respecting geine which have been advanced in this Report, will probably enable us to decide as to the preference to be given to any one of these methods. And here I have it in my power to give the opinion of Dr Dana, whose remarks I am always happy to substitute for my own, on a subject with which he is so familiar, and which he has done so much to elucidate.

"The fact," says he, "that peat or turf is very soluble, in alkali, seems not to be known among our farmers. The usual practice of mixing lime with peat or turf is decidedly the worst which can be followed. The geine which constitutes a large part of peat bogs, forms with lime a compound little soluble in water, requiring at least 2000 parts of water to one of geate of lime; and if the compound has been dried and sun-baked, a still larger portion of water is required; it becomes, in truth, almost insoluble. With alumina, geine forms a compound still more insoluble than with lime: and though the vegetable matter in combination with these earthy bases, is actually absorbed by the roots of growing plants, still the geine is in a state much less favorable that when in combination with alkali. Mix ley of wood ashes with peat, and we form a dark brown vegetable solution: the alkaline properties are completely neutralized by the geine, and very often ammonia escapes from turf when treated by caustic alkali. When we add, that this geine absorbs and retains nearly its own weight of water without seeming moist, it is evident, that with the use of ley or wood ashes, the value of peat as a manure will be very much increased."

I will only add, that in my opinion, it would be very desirable to have a series of experiments performed by a practical chemist upon the different

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* The agency of geine in the fermentation of manure is thus explained by Dr Dana with his usual clearness and felicity.

"By fermenting dung vast volumes of ammonia are liberated. I do not think that it is the action of gases as such, which we want or which nature intends as food of plants to be derived from the soil. The air is always full of all which this fermenting manure can supply in a gaseous form. The true actions of ammonia and carbonic acid resolve into their effects on geine. The ammonia combines as alkali with that, and thus it becomes very soluble, and the carbonic acid produces sur-salts of the earthy geates of lime and magnesia. It is these, liberated the moment the plant demands them, which cause all the geine of the manure to become alkaline soluble geates."

"How wide is the influence of geine! It not only enters by itself into the food of vegetables but becomes the very solvent which nature has proposed to act on the alkaline earths and oxides, dissolving them as they are liberated from decomposing granitic sand."

varieties of our peat, and especially upon the best mode of converting it into soluble geine. Since by the old methods of analysis the different varieties of peat would be found to differ from one another only in the quantity of organic matter which they contain, I supposed it would be useless to analyze them, and therefore did not collect specimens of the peat and other vegetable matters that occur in our swamps. The doctrines respecting geine put a new aspect upon the case, and lead me to regret that such a collection was not made. The labor of doing it now, however, is small; and when it is considered what an immense mass of organic matter now lies useless in our swamps, while the fields around them yield but a scanty crop, and that the chief reason why our farmers make so limited a use of this manure, is, that they find it difficult to convert it into soluble nutriment, I sincerely hope that the government will do all in its power to bring into use this important part of our fossil resources.

Marsh Mud.—Every intelligent farmer probably knows, that this substance forms an excellent manure; although I apprehend it is employed far less than its value demands. An intelligent farmer in Maryland states, that he "deems it more valuable than barn-yard manure;" and that "it never failed in any application he had made of it." He also prefers it to marl, because "it is more accessible, its effects are quicker and much more can be done in the way of improvement for the same money." At the same time he confesses, that the permanent advantages of marl are much greater; and thinks that marl and marsh mud will both be improved by combination." This last remark appears still more important, when we ascertain what it is that gives an agricultural value to this substance. The fact is, it sometimes contains a large quantity of geine, and sometimes but little, while the quantity of the salts of lime, soda, and magnesia, is rather large; so that sometimes a mixture of marl will be of service, and sometimes not.

Concluding remarks upon Soils.—Though I have dwelt so long upon the analysis and improvement of our soils, it will be seen that I have touched only a few of its more important features, and that even these are but imperfectly considered. Many minor points, of no small importance, however, have been wholly passed over, or only alluded to; and sensible that I cannot do them justice at present, I shall not attempt to discuss them. My great object has been, after ascertaining the greatest deficiencies in our soils, to satisfy the Government that we have the means of remedying them and of making great improvements in them, by the aid of chemistry. If I may hope that I have accomplished this object, then I take the liberty to inquire, whether it be not important enough, and whether there is not enough still left to accomplish respecting it, to make the appointment of a *State Chemist*, desirable? We ought to have still further experiments made on the subject of geine, and the salts, which the soils contain; also accurate analyses of the crops grown on soils with different manures; and investigations as to the manner in which calcareous matter acts upon vegetable and animal substances; as also experiments directed by an able and experienced chemist, on the best mode of bringing into use the vast deposites of geine and vegetable fibre which our state contains. And since we have chemists of this character among us, why should not the services of at least one of them be secured for this object? The geological surveyor might often collect substances for analysis; but if obliged to go as thoroughly into the chemistry of the subject as is necessary to valuable results, he cannot within any reasonable time accomplish the more appropriate objects of his appointment. In at least one state of the Union, where geological surveys are in progress, one gentleman is appointed, whose time and attention are exclusively devoted to the chemical examination of the soils, ores, &c., collected And I would fondly believe, that Massachusetts will not rest satisfied, till this work is done at least as thoroughly as in any other state. I believe there is abundant labor, for an experienced chemist upon our soils alone; but many other substances, found in the state, ought to be analysed, that their real value may be known.

I do not doubt but the Government and every intelligent reflecting citizen will feel the vast importance of energetic efforts to improve our soils so that they may sustain a larger population. This is the only way to check the tide of emigration that sets so strongly to the great West. For if our sons can be made to see the soil of New England doubling its increase, as I verily believe they might in one or two decades of years, the rich alluvia and prairies of the West will not be able to draw them away from the graves of their fathers; especially if they learn that those fertile regions will at length become exhausted of their geine and salts, and then will probably require as much labor to cultivate as the soils of Massachusetts.

Some, however, may contend, that it is more important, to transfer the New England character to the unsettled West, than to multiply our numbers and wealth at home. But the history of the world leads us to fear, that New England character cannot long be preserved except upon New England soil; or upon a soil that requires equal industry for its cultivation. Place New England men where the earth yields spontaneously, and the locks of their strength will soon be shorn. If we look over the map of the world, and the history of the past, we shall find as a general fact, that the brightest exhibitions of human character have been made, in regions where nature has done less, but art and industry more. If, therefore, we wish to increase the moral power of New England, it must be done by improving her soil, and increasing her resources and her population. If these views are correct, which I acknowledge do not fall in with the prevailing notions, they furnish a new stimulus for vigorous effort in the improvement of our soils.

From the Genesee Farmer.

WHEAT WORM.

No apology can be necessary for introducing this subject so frequently into the columns of the Farmer. The extent of the interest involved in the progress of the wheat worm can only be estimated by those who have traversed Western New York, and witnessed the quantity of wheat annually sown in this district. We make the following extract from the Seneca Observer, for the purpose of calling the attention of farmers to the statements made in it, and particularly the one that the worm continues its ravages after the wheat is ripe and put in the barn.

We have had the impression, in common with most others, that after the berry had become hard, the ravages of the worm ceased, or was only continued on such kernels as were attacked before the wheat had become ripened. We have within a few days examined wheat in which worms were found in abundance, and could find no kernels injured, except such as from their shrunken and pale appearance had evidently suffered when in the milk, or before the berry had become ripe. That the *weevil*, the product of a bug, destroys the grain in the mow or the granary, is well known; but that the *worm*, the product of a fly, does the same, we think requires further examination and proof before it is fully admitted. Should such prove to be the fact, it would indeed prove to be an alarming feature in the history of the wheat worm. At the east, where its ravages have been the most extensive and longest continued, we have never heard any apprehensions of injury after the wheat had ripened and was gathered. We have instituted some experiments having a bearing on this matter, and we hope farmers generally will lend their aid in elucidating this point. Is not the noise spoken of occasioned by the crawling of the worm and the rustling of the chaff, rather than by its feeding? and does not the pressnre in a mow of wheat cause the speedy death of far the greater part of the worms in the gathered grain? It is well known that when wheat is threshed immediately after gathering, the worms will be many times more numerous than in the same wheat, if left in the barn for one or two months before threshing.

"It is curious as well as alarming to observe the operations of this destructive worm. It commences its work early, and continues it late. When in the field, it can be heard making a noise much resembling that of the silk worm while eating. After it commences, it devours with all greediness, until the crop is gathered; and, what is still worse, and perhaps not *generally known*, it continues its work of destruction, *after* the crop is gathered. Of this fact there can now be no doubt. It has been witnessed by many of the most observing farmers of our neighborhood. This insect can be heard in the mows and stacks, and on examining the heads of wheat, they are found to contain many of these destroyers. This is the more alarming to the wheat grower, as it is next to impossible for him to thresh out his grain as soon as harvested, owing to the other necessary labor that is pressing upon him at this season of the year—the completion of his haying, and the preparing of his fallow ground for another crop. Yet he must thresh his wheat or lose a goodly portion of what has been gathered."

We do not allow ourselves to indulge in the gloomy anticipations of the concluding paragraphs of the article in the Observer. We remember that when the Hessian fly became so destructive, and its ravages extended so rapidly, many were found who fancied that wheat could never again be grown in the United States. Such predictions have been utterly falsified by the event; and such we doubt not will be the result in regard to the grain worm. As yet we see no reason for deserting the fair fields of Western New York, or abandoning the culture of wheat. Partial failures may indeed be expected; but the beautiful wheat that finds its way in such quantities to our markets affords conclusive proof that our fields yet yield their increase, and that Providence has not ceased its kindness and its blessings.

A clergyman in New York advises his hearers to subscribe and pay for a good newspaper.

NEW ENGLAND FARMER,
AND GARDENER'S JOURNAL.

BOSTON, WEDNESDAY, OCTOBER 3, 1838.

AGRICULTURAL DEPOSITORY.

A CARD.—The Commissioner of Agricultural Survey respectfully solicits of the farmers in Massachusetts, or his correspondents in other places, small samples of any of their agricultural products, which they may regard as possessing any peculiar excellence. Corn in the ear, of any variety; Wheat; Rye; Barley; Oats; Buckwheat; Broom Corn; Cocoons; Silk; Wool; and valuable grasses. He would likewise be pleased to receive specimens or models of any valuable implement or invention connected with husbandry or the rural arts; or models or drawings of any improved farm buildings; or pictures of any valuable domestic animals. His objects are wholly public. His intention is to place such things in a situation where they may be examined by the farmers of the State; and to lay the foundation of an Agricultural Museum solely for the public benefit. He hopes so much public spirit will be felt in this case by his agricultural brethren, that their liberal contributions will soon render the collection worthy of public attention. The beginnings must be small; but in time the collection may be of great utility. It is important in respect to any article sent that a written account should accompany it.

He particularly solicits likewise the attention of intelligent shipmasters and others visiting foreign countries, to the collection of valuable agricultural seeds in places where they may go; and pledges himself, that if they will do him the favor to place them under his care, he will gratefully receive them and dispose of them in a manner to test their value and diffuse their benefits.

Any such donations may be forwarded for the present to the store of Messrs James K. Mills & Co. Kilby street, Boston; to his address. The expenses of freight or transportation will be cheerfully paid.

HENRY COLMAN,
Commissioner of Agr. Survey in Massachusetts.

Oct. 1, 1838.

Printers in Massachusetts, in town and country, favorably disposed to this object, are respectfully requested to give the above card one or two insertions.

ON PAINTING ROOFS.

Milford, Sept. 28, 1838.

MR EDITOR:—Sir,—I wish to make enquiry through your paper respecting the painting of roofs, and the best paint or composition for preserving them.

A SUBSCRIBER.

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REMARKS.—We have seen different preparations applied for the preservation of roofs, and been acquainted with many recipes for composition for the same purpose; yet from our own observation and experience, we believe there is no great economy in expending much upon a roof for paint. The object of the greatest importance is to get good shingles and then have them well laid. There are those, however, who think differently. A mixture of black lead and linseed oil is perhaps as good a mixture as can be used if it is thought expedient to paint; but it is very difficult with any paint, to fill every crevice so that water will not find its way between the joints to the unpainted shingle, and here is the trouble; the wet gets under the shingle, and in consequence of their being painted do not dry so quick, and of course will decay sooner for being painted. It is sometimes the case when a man undertakes to build substantially he paints the shingles as they are laid, which no doubt adds much to the durability of the roof, but then does not the expense of paint and additional labor and interest on the same, amount to as much, or more, than another shingling? We were much struck with the appearance of a noble barn, which was built two years since by our friends the Shakers at Shirley. They never do anything by the halves, but whatever they undertake is done in the very best style. The barn was finished in the most substantial manner, from the foundation to the ridge-pole, but we were forcibly reminded by it of Noah's Ark, for it was "pitched within and without." Our friends informed us that the shingles were laid in hot pitch, or a mixture of pitch and tar, and the building coated over with the same. This mode of laying shingles, has one advantage certainly; if fire should take hold of it, it would burn without much trouble.

Since writing the above, a gentleman of some experience has informed us that if shingles are dipped in strong alum water, they will last much longer, and it is also a security against fire. We find in Vol. 12, page 283 of the N. E. Farmer the following receipt and remarks, which we copy, as many of our present subscribers have not taken the work so far back.

"For painting the roofs of buildings, Mr Patterson of New Jersey, has, some years since, given the following directions, which have been highly approved, as the best composition known for preserving the roofs of houses; as it is found that it hardens by time, and is an effectual preservative against the roof taking fire from the sparks the chimney.

"Take three parts of air slacked lime, two of wood ashes, and one of fine sand, and add as much linseed oil as will bring it to a consistence for working it with a painter's brush. Great care must be taken to mix it perfectly.

"We believe grinding it as a paint would be an improvement. Two coats are necessary; the first rather thin; the second as thick as can be conveniently laid on."

We have not seen an application of the above composition, and therefore, give it as we find it. It is no doubt a good composition if it could be applied to every part of the shingle. We have answered our friend "A Subscriber" as well as we are able; if any of our correspondents who have more experience, can add anything which will meet his case or benefit the public, we shall be much obliged. J. B.

Massachusetts Horticultural Society.

EXHIBITION OF FRUITS.

Saturday, Sept. 29, 1838.

From R. Manning, Esq. Salem, fine specimens of the following Pears: Bergamotte d'Autumnal, Green Sugar, Styrian, Louise, Bonne of Jersey, Autumn Superb, Belle St. Bonne, and Webber's Yellow Autumnal. (Mr Manning is entitled to the thanks of every lover of *Good Fruits* for his exertions to introduce new varieties and to sustain the exhibitions of the Society.)

From Samuel S. Lewis, Esq. Brinley Place, Roxbury, (the late residence of Hon. H. A. S. Dearborn, a zealous friend and promoter of the best interests of this Society,) the following Pears: Autumn Bergamotte, Passe Colmar, Napoleon Doyenne Gris, Newton Vergaleau, Brown Beurre Capiamont, Lewis and Moorfowls Egg, and five other specimens not named. These specimens were all fine.

From E. M. Richards, Esq., fine seedling Clingstone Peach.

From Mr Eustis of South Reading, Isabella Grapes.

From Mr S. R. Johnson, Charlestown, very fine Black Hamburg and Sweetwater Grapes.

From M. P. Sawyer, Esq. Portland. *Plums*, variety Imperatrice and Magnum Bonum; the latter were very beautiful the finest exhibited this season.

From Mr Pond, Cambridgeport; Semiana Plums, very large and fine; also Isabella Grapes, and a new seedling Grape called *Pond's Seedling*. This fruit was proved to be a very fine variety and far superior to the Isabella, worthy of cultivation.

From James L. L. F. Warren, fine specimens of Imperial Lemon Clingstone Peach.

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The following letter, with the specimens of Fruits were received from the Hon. John Lowell of Roxbury.

Roxbury, Sept 29, 1838.

To the President of the Massachusetts Hort. Society:

SIR—I send specimens of "*Beurre Spence*" nearly or quite ripe. It should be understood, that for 50 years I have thought the soil at my place, not adapted to produce the *best pears*, except certain kinds which come to high perfection in it. I send an unripe sample of *Beurre Bronze*, which Parmentier highly commends. Also, a bunch of Grapes,* sent neither for its size nor quality, but novelty. It is one of the grapes sent by the American Consul at Ferrol, to Mr Cook, late Vice President of your Society. It is to *me* wholly new in foliage, wood, bunches, berries and taste. It is a prolific grape, and can be made to produce *immense* bunches for those who desire it; of its value, as a fruit, it is not for me to decide.

I have added Beurre Crappeau and Milanaise or Great Britain; a crisp pear when ripe.

I am, dear sir, very respectfully,
Your humble servant,
JOHN LOWELL.

For the Committee,
JAMES L. L. F. WARREN.

* The Grape was new to the Committee, but was found to be of very fine flavor.

The reports of the Horticultural Society are necessarily deferred until next week, as the committee have not fully completed them. We shall publish the whole in one paper, which will make it necessary for us to issue an extra.

THANKSGIVING IN MASSACHUSETTS.—The governor of this State has appointed THURSDAY, the 29th day of November next, as a day of Public Thanksgiving and Praise.

The heaviest Wheat and Rye crop, perhaps ever taken in this county, has been gathered within the last fortnight—in good order—plump and well filled. The grass crop is also good. The Corn crop, which, at the outset was very promising, has been seriously injured in some parts of the county from a long prevailing drought. In the south and southwest portion of the county it will be an entire failure. Many of our farmers in Warwick—the southern part of Minisink—and in Sussex Co. N. J. are now engaged in cutting it up. The Oat, Potato, and Buckwheat crops have suffered severely from like causes. In the other sections of the county, where the drought has not been so severely felt, the Corn crop particularly is very promising.—*Goshen N. Y. Republican.*

The Stockholders of the Eastern Railroad have resolved to complete their railroad as far as Newburyport, and to put the rest to the East line of the State under contract as soon as they have satisfactory assurances that it will be continued to Portsmouth.

The Trustees of the Maryland Agricultural Society have postponed the Fair which was to have been held on the 1st of November, on account of the deplorable drought which has prevailed throughout the Eastern Shore.

BRIGHTON MARKET.—Monday, Oct. 1, 1838.

Reported for the New England Farmer.

At Market 400 Beef Cattle, 350 Stores, 2,450 Sheep, and about 1,500 Swine.

Prices—*Beef Cattle.*—Sales were brisk. First quality, $7 50. Second quality, $6 75 a $7 00. Third quality, $5 50 a $6 00.

Stores.—In good demand. Yearlings, $9 a $14. Two Year Old, $16 a $28. Three Year Old, $22 a $33.

Sheep.—Sales brisk. At $1 62, $1 88, $2 16, $2 50 and $3 25.

Swine.—Last week's prices were fully sup ported. Lots to peddle at 6 1-2 a 7 1-2. At retail, 7 1-2 a 9. Old hogs, 7 to 8.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending September 30.

September, 1838.		7 A.M.	12, M.	5, P.M.	Wind.
Monday,	24	50	62	58	N. E.
Tuesday,	25	44	68	58	E.
Wednesday,	26	52	72	64	S. E.
Thursday,	27	46	68	62	S. W.
Friday,	28	58	70	58	S.
Saturday,	29	68	68	60	S. E.
Sunday,	30	54	68	60	N. E.

FOR SALE.

The thorough bred Short Horned Durham Bull, Superior. Superior was calved in August, 1831. He was got by Frederick, and he by Wye Comet.

Dam, Yellow Rose, by Young Denton.
G. Dam, Arabella, (Imported,) by North Star.
G. G. Dam Aurora, " " Comet.
G. G. G. Dam " " " Henry.
G. G. G. G. Dam " " " Danby.

The above pedigree may be found in the English Herd Book.

He is a roan and perfectly gentle and docile; and his stock, which may be seen at the farm of the subscriber, will testify to his value. Price, $250. Apply to C. N. Bement, Esq. near Albany, N. Y., or to Wm. Augustus North, Mount Marie, Duanesburgh, N. Y.

October 3, 1837. 4w

MULBERRY TREES.

1500 Morus Multicaulis.
1000 White Mulberry.

For sale, the entire lot, or in small quantities. They are very superior, and being raised so far north, have the advantage over southern raised trees, for this State.

JAMES STEWART,
Indian Hill Farm, near Newburyport, Mass.
October 3, 1837. 3w

NOTICE.

The subscriber offers for sale his real estate in Westford and Groton; consisting of his homestead, 35 acres, his farm, 117, one pasture, 17 acres, one do. 33 acres, one woodlot, 13 acres, one do. 5 acres, and one do. 10 acres. For further particulars see his advertisement in the Lowell Journal, or inquire of the subscriber at his house, near the meeting houses and academy in Westford.

EPHRAIM ABBOTT.

FARM FOR SALE.

In Cambridge, about one mile from Murdock's Hotel on the West Cambridge road with a valuable stone ledge on the same; containing forty acres of good land with the buildings on the same. It will be sold at a bargain if applied for soon, as the present owner is about removing to the West. Apply to the subscriber on the premises.

Sept. 25. 3w AMMI C. TEEL.

FOR SALE.

A two years old Bull of the Cream pot breed; from Mr Jaqueth's stock at Ten Hill Farm, Charlestown. Cows of the above breed make the most butter of any stock in this country. Inquire of the subscriber near the factories in Waltham. ISAAC PARKER.

WANTED TO HIRE

A single Man, who is capable of taking charge of a small Farm. Inquire of JOSEPH BRECK & CO.

Sept. 5.

LAYING OUT GARDENS AND ORNAMENTAL PLANTATIONS.

E. Savers begs leave to inform his friends and the public in general that he will attend the laying out gardens and ornamental plantations, and hopes by strict attention to business to merit the approbation of those who may be pleased to employ him

All orders left with J. Breck & Co. Agricultural Store, No. 52 North Market Street, will be punctually attended to.

BONE MANURE.

The subscriber desires to inform his friends and the public that he has been in the Bone business more than ten years, and has spent much time and money to ascertain how bones may be converted to the best use, and is fully satisfied that they form the most powerful stimulant that can be applied to the earth as a manure. He offers for sale ground bone at a low price, and is ready to receive orders to any amount, which will be promptly attended to

Orders may be left at my manufactory, near Tremont road, in Roxbury, or at the New England Agricultural Warehouse and Seed Store, No. 52 North Market Street, Boston.

Sept. 20. NAHUM WARD.

FRUIT AND ORNAMENTAL TREES, MULBERRIES, &c.

Nursery of William Kenrick.

The Catalogue of Fruit and Ornamental Trees for 1838 is now ready, and will be sent to all who apply. It comprises a most extensive selection of the superior varieties of Pears, Apples, Plums, Peaches, Cherries, Quinces, Gooseberries, Raspberries, Currants, Strawberries, Grape Vines, &c. The stock of Cherries and Peaches now ready is particularly large. Also, Ornamental Trees, Shrubs, Roses, Honeysuckles; Pæonies, Dahlias and other Herbaceous Flowering Plants.

100,000 Morus Multicaulis are now offered for sale; the trees genuine and fine, will be ready for delivery at the cities of Boston, New York and Philadelphia, in October next, at prices fair, and varying with the size, and the quantity which may be desired. Also, Broussa and other varieties.

Mulberry and other trees, when so ordered, will be securely packed for safe transportation to distant places, and all orders promptly executed, on application to B. D. Breck, Commission Store, No. 132 Water Street, New York, M. S. Powell, Seed Store, No. 7 Arch Street, Philadelphia, or to the subscriber, Nonantum Hill, Newton, near Boston.

August 1, 1838. WILLIAM KENRICK.

MULBERRY TREES.

200,000 Genuine Mulberry Trees, and as many more as may be wanted, of the most approved kinds—consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for companies or individuals to be supplied, from the most extensive collection of mulberrry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with Messrs. I. B. Colt, Secretary of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider, & Co. Savannah, Ga.; Bliss Jenkins, &Co. Mobile, Al; James Lyman, St. Louis, Mo.; Case and Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry Plantations.

Apply at the office of D. STEBBINS.
Northampton, Aug. 22, 1838.

FARM FOR SALE.

That large and beautiful farm, late residence of the Hon. Judge Dame, situated in Rochester, N. H. six miles from the village of Dover, and four miles from Great Falls. Said farm contains upwards of 300 acres of land and a large and well finished two story house, with barns and other outbuildings in good repair. About 150 acres are covered with hard and pine wood, besides a good portion of heavy timber. There are also on the premises large quarries of the most desirable granite. Any person desirous of purchasing may learn further particulars on application to Joseph Breck & Co., No. 51 and 52 North Market Street, Boston.

August 15, 1838.

FOR SALE.

Five acres of good Salt Marsh, in Quincy, or (Squantum so called.)

Also, Four acres of Salt Marsh in Brighton.

Also, Several full blood animals, cows and calves. Apply to A. Greenwood, on the Welles Farm, Dorchester, near Dr Codman's meeting house.

Sept. 12, 1838.

PRICES OF COUNTRY PRODUCE

CORRECTED WITH GREAT CARE, WEEKLY.

			From	To
Apples,		barrel	1 50	2 50
Beans, white, Foreign,		bushel	1 35	1 75
" " Domestic,		"	2 00	2 25
Beef, mess,		barrel	15 00	16 00
No. 1.		"	13 50	14 00
prime,		"	12 00	
Beeswax, (American)		pound	28	32
Cheese, new milk,		"	6	10
Feathers, northern, geese,		"		
southern, geese,		"	37	45
Flax, (American)		"	9	12
Fish, Cod,		quintal	3 25	3 40
Flour, Genesee, cash,		barrel	9 37	9 50
Baltimore, Howard street,		"	8 75	9 00
Baltimore, wharf,		"		
Alexandria,		"		
Rye,		"	5 00	5 50
Meal, Indian,		"	4 00	4 50
Grain: Corn, northern yellow,		bushel		
southern flat, yellow,		"	1 06	1 07
white,		"		1 02
Rye, northern,		"		1 20
Barley,		"	80	85
Oats, northern, (prime)		"	53	54
Hay, best English, per ton of 2000 lbs.				16 00
Eastern screwed,			12 00	14 00
Honey, Cuba,		gallon	50	52
Hops, 1st quality,		pound	7	8
2d quality,		"	6	7
Lard, Boston, 1st sort,		"	14	15
southern, 1st sort,		"	13	15
Leather, Philadelphia city tannage,		"	27	29
do. country do.		"	23	26
Baltimore city tannage,		"	25	27
do. dry hides,		"		
New York red, light,		"	22	23
Boston, do. slaughter,		"	19	21
Boston dry hides,		"	18	20
Lime, best sort,		cask	80	85
Mackerel, No. 1,		barrel		11 00
Plaster Paris, per ton of 2200 lbs.		cask	2 50	2 62
Pork, extra clear,		barrel	26 00	28 00
clear,		"		25 00
Mess,		"	23 00	24 00
Seeds: Herd's Grass,		bushel	2 63	2 75
Red Top, southern,		"	80	1 00
northern,		"		
Hemp,		"	2 62	3 00
Flax,		"	1 25	1 33
Red Clover, northern,		pound	22	25
Southern Clover,		"	20	22
Soap, American, No. 1,		"	6	7
" No. 2,		"	5	6
Tallow, tried,		"	10	11
Teazles, 1st sort,		pr M.	3 00	3 50
Wool, prime, or Saxony Fleeces,		pound	50	55
American, full blood, washed,		"	45	50
do. 3-4ths do.		"	42	45
do. 1-2 do.		"	38	40
do. 1-4 and common,		"	35	37
Northern pulled. Pulled superfine,		"	45	50
No. 1,		"	40	42
No. 2,		"	28	30
No. 3,		"		

PROVISION MARKET.

RETAIL PRICES.

Hams, northern,	pound	15	16
southern and western,	"	14	15
Pork, whole hogs,	"	10	11
Poultry, per pair,	"	50	1 00
Butter, tub,	"	18	22
lump,	"	25	27
Eggs,	dozen	17	18
Potatoes, new,	bushel	70	75
Cider,	barrel	2 00	2 50

FARM FOR SALE.

An excellent farm, near the centre of Framingham is offered for sale, on liberal terms. Inqnire at this office.

Aug. 22, 1838. 3m

EMPLOYMENT WANTED.

A Gardener out of employment would be happy to attend to orders for budding or gardening of any description. Apply at the New England Farmer Office.

WINTER RYE.

Just received at the New England Seed Store and Farmer Office, a few bushels of prime Winter Rye.

JOSEPH BRECK & CO.

Aug. 13, 1838.

MISCELLANEOUS.

THE FIRST YELLOW LEAF.

Thou bring'st sad thoughts to me,
First yellow leaf;
Thou tell'st the change so soon to be,
From Summer, bright and brief,
To Autumn's sear and sadd'ning time,
When gladness leaves our happy clime.

But few short months have gone,
Thou fragile thing,
Since first upon the grassy lawn
So gaily drest by Spring,
I watched thy beauties, one by one,
Spring forth to greet th' enliv'ning sun.

And all this lovely earth,
So fresh and green,
Prais'd well the pow'r that gave it birth,
And deck'd it all unseen.
I gazed, and joy my bosom fill'd;
Nor thoughts of blight, my transport still'd.

And now to see thee fall
So soon to earth,
And thus to see thy bright train all
Resign their notes of mirth,
Nor whisper to the breeze again,
'Tis sad, and well might give me pain.

But there are other tones
Than fading leaf,
That thus speak in thy dying moans:
"Thy life, like mine, is brief;
Thou, too, may'st bloom but for a day,
Then fade, like Autumn leaves away."

SLEEPING CHAMBERS.

Is the philosophy of sleep enough considered? Are the circumstances connected with this condition of human nature, for one quarter or one third of human life, duly attended to?

While we are awake, our bodies are, as a general rule, more or less in motion; and the air, even in our rooms, more or less in motion also. But while we sleep we are quiet, the air is quiet, and is soon contaminated. Do people consider how fast?

The air is spoiled fast when but one person occupies a bed, and there is but one bed in the room. Franklin and others have supposed the air to be rendered unfit for breathing at the rate of a gallon a minute. But if so, how many of us breathe bad air in our sleeping rooms! We seldom lie quietly in our beds with the doors and windows closed, a heap of feathers under us, and thick clothes over us, more than an hour at most, before we begin to suffer. This is the case if the sleeping room is large; but if small, it is much worse. It is impossible to have a hogshead of poisoned air diffused through a sleeping room without doing mischief.

I know it will be said that the carbonic acid gas, produced by breathing, is heavier than atmospheric air, and soon settles to the floor; and if the bed-room is not so small that the room, like a culinary vessel, gets full of it up to the surface of the bed, before the individual wakes, there is no danger.

But it does not all settle to the floor. In hot weather, it scarcely settles at all; though in cold weather it does so much more. Nay, even in cold weather some of it falls on the bed, and much of it is entangled in the bed clothes. This, however, is not quite all. The same poisonous gas which is formed by breathing, is also constantly formed by the whole surface of our bodies, in greater or less degree; and this, if improved under the bed clothes, between them and a thick bed of feathers, is not only injuring us by its contact with our skins, but still more by our breathing it. For nothing is more common than for a small quantity of this impure air to escape from the bed by the side of our bodies, especially upon the least motion; thus giving an opportunity—nay, a certainty—of inhaling a part of it.

To all these evils we are subjected, I have said, when under the most favorable circumstances; that is, when our sleeping rooms are large, and when only one person occupies a bed, and one bed in an apartment. But when two persons, or even more, sleep in the same bed, when the room is small, or has several beds in it, and when the beds are of feathers or down, the evil and the danger are very greatly increased.

I wish sleeping rooms were generally much larger than they are. Then I wish they were always freed as much as possible from unnecessary clothing, and every thing which could retain bad air. The bedstead should be rather high, and only broad enough to accommodate freely and fully one person. The bed should be of some material which is light and porous, as oat or wheat straw, corn husks split finely, grass, hay, &c.; and the clothing should be adapted to the season, but should never be so constructed as to prevent entirely the passage of the air through it. No dogs, or cats, or lamps, or fires without flues, should be found in the room. A window or door which will admit fresh air should be, in all seasons, but especially in hot weather, left open in such a direction from the bed as will not expose the occupant to have currents of air fall directly upon him;—to prevent the possibility of which, however, a screen might be placed before the window. Then, in the last place, and as I have already intimated, the bed should contain but one person, and unless the room is exceedingly large, there should be but one bed in it.

Perhaps it will be said that I require too much. Most persons, I shall be told, cannot have all this. No, they cannot. Sin is in the world, and has long been in it; and it will be long before we can get it out entirely. But sin has brought with it among other evils, that of poverty; and poverty does not always permit every thing which is best for health. But one thing at least we can do; which is, to come as near what we know to be truth as possible.— *Library of Health for September.*

SIGNS OF PROSPERITY.— Do you see that are house on that risin' hummock to the right there?—Well, gist look at it, that's what I call about right. Flanked on both sides by an orchard of best grafted fruit, a tidy little clever flower garden in front, that the galls see to, and a'most a grand sarce garden over the road there sheltered by them are willows. At the back side see them everlastin' big barns; and, by gosh! there goes the dairy cows; and a pretty sight too; that fourteen of 'em marchin' Indgian file arter milkmin', down to that are medder. Whenever you see a place snugged up and lookin' like that are, depend on it the folks are of the right kind. Them flowers too, and that are honeysuckle, and rose bushes, show the family are brought up right; somethin' to do at home, instead of racin' about to quiltin' parties, huskin' frolics, gossippin', talkin' scandal, and neglectin' their business. Them little matters are like throwin' up straws, they show which way the wind is.—When galls attend to them are things, it shews that they are what our minister used to call, "right minded." It keeps them busy, and when folks are busy, they ha'n't time to get into mischief; and it amuses them too, and keeps the dear little critters healthy and cheerful.—*Sam Slick, second series.*

EXTRAVAGANCE IN THE UNITED STATES.— Do you see them are country galls there, said Mr Slick, how they are tricked out in silks, and touched off with lace and riband to the nine's, a mincin' along with parasols in their hands, as if they were afear'd the sun would melt them like wax, or take the color out of their faces, like a printed cotton blind? Well, that's gist the ruin of this country.

It ain't poverty the blue noses have to fear, for that they needn't know without they choose to make acquaintances with it; but it's gentility.—They go the whole hog in this country, you may depend. They ain't content to appear what they be, but want to be what they aint; they live too extravigant, and dress too extravagant, and won't do what's the only thing that will support this extravagance; that is, be industrious. Gist go into one of the meeting houses, back here in the woods, where there ought to be nothin' but homespun cloth, and home made stuffs and bonnets, and see the leghorn and palmettors, and silks and shalleys, merenos, gauzes, and blonds, assembled there, enough to buy the best farm in the settlement. There's somethin' not altogether gist right in this.—*Samuel Slick, second series.*

ORIGINAL ANECDOTE.—A drunken fellow, not long since, staggered into one of our most respectable victualling cellers, and greeted the attendant with a familiar 'how are you?' 'Who are you,' said the host, 'are you drunk?' 'Aye,' said the bacchanalian, 'drunk enough! and have been every day for two years! My brother Josh and I am engaged in the temperance cause; he goes about delivering lectures, and I give samples of intemperance. Now shant we get up a reformation.'

COUNTRY SEAT IN NEWTON, FOR SALE.

The subscriber offers for sale the house in which he now resides, with the Barn, Sheds, Garden and about 35 acres of land, situated on Nonantum Hill, in Newton, 5 1-2 miles from the city. The garden occupies nearly two acres, is stocked with a great variety of fruit tress, and about 10,000 Antwerp Raspberry Vines. The place may be seen and further particulars obtained on application at the premises.

LOT WHEELRIGHT.

July 16th.

ALDERNEY STOCK FOR SALE.

For sale a full blooded Bull, 3 years old the first of July next—one Cow, five years old—and a Heifer three years old. The Cows are said to be the richest Milkers of any imported. For further particulars address L. M. WHEATON, Norton, Mass., or a line left at this office, will meet with prompt attention. June 27

FOR SALE.

A Ram and Ewe from the Cape Good Hope. Inquire at this office.

THE NEW ENGLAND FARMER.

Is published every Wednesday Evening, at $3 per annum payable at the end of the year—but those who pay within sixty days from the time of subscribing are entitled to a deduction of 50 cents.

TUTTLE, DENNETT AND CHISHOLM, PRINTERS, 17 SCHOOL STREET.. BOSTON.